## *ISTEP*+: Grade 6 Mathematics Blueprint

Standard Assessed	Description	Percent Range *
1 – Number Sense	Questions may include comparing and ordering numbers; applying the concept of negative numbers; finding the absolute value of numbers; converting numbers between fractions, decimals and percents; using models to represent ratios; and finding factors and multiples of numbers and using them to solve problems with fractions.	10-20%
2 – Computation	Questions may include adding, subtracting, multiplying, and dividing integers; multiplying and dividing decimals and positive fractions; and solving problems involving integers, fractions, decimals, ratios, proportions, and percents.	12-22%
3 – Algebra and Functions	Questions may include writing and solving one-step equations and inequalities; writing and using formulas to solve problems; evaluating expressions using order of operations; identifying and graphing ordered pairs on the coordinate plane; and solving problems involving linear functions.	12-22%
4 – Geometry	Questions may include solving problems involving angles (vertical, adjacent, complementary, and supplementary), triangles (sum of interior angles is 180°) and quadrilaterals (sum of interior angles is 360°); identifying similar shapes; and identifying translations and reflections of shapes.	8-18%
5 – Measurement	Questions may include measuring length, area, volume, weight, time, temperature, and angles; comparing measurements of length; solving problems involving circumference and area of circles; solving problems involving surface area and volume of right prisms and cylinders; converting temperatures between Celsius and Fahrenheit; and solving problems involving money.	8-18%
6 – Data Analysis and Probability	Questions may include organizing and interpreting data in appropriate graphs, plots, and tables; solving problems involving mean, median, and mode; finding outcomes for compound events; and solving problems involving probability.	5-15%
7 – Problem Solving	Questions may include analyzing, sequencing, prioritizing, and identifying relevant and irrelevant information to solve problems; using various strategies, skills, and concepts to solve problems; justifying solutions using words and symbols; and determining if solutions are reasonable.	10-20%

<sup>\*</sup> This range represents the approximate emphasis for each standard on the assessment.